

Summary of Major Points from the Testimony of Bruce Lawrence

for the Subcommittee on Environment and Hazardous Materials of the House Committee on  
Energy and Commerce hearing on “H.R. 1534, the Mercury Export Ban Act of 2007”  
June 22, 2007

1. An export ban will cause an increase in world atmospheric mercury pollution.
2. The export ban will increase the world market price for mercury, however NOT enough to prevent artisanal gold mining.
3. The increased price of mercury which results from the export ban will cause an increase in virgin mercury mining.
4. The increased virgin mercury mining will be done by artisanal mercury miners who are much less efficient. The result will be a large increase in global mercury pollution.
5. The combined export ban by the U.S. and European Union will cause mercury pollution to increase as much as 500 tons per year.
6. I encourage the resumption of mercury sales from stockpiles to offset world virgin mercury production.

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It is NOT advisable to establish a Federal stockpile for mercury. The result would be that more mercury air emissions will occur by the removal of secondary mercury from the international market.

The world consumes approximately 2,000 tons of mercury per year. Of this, roughly 50% or 1,000 tons is provided by virgin mercury mining. Reports<sup>1</sup> indicate that virgin mercury mining will lose approximately 4% of their production to air emissions. That makes 40 tons of mercury pollution annually. Virgin mercury mining occurs in China and in Kyrgyzstan.

The markets in both China and Kyrgyzstan have shown that they will purchase secondary mercury to offset their mining production. If the United States were to encourage the sale of mercury from caustic soda plants and from the U.S. government stockpiles, then the world would be relieved of the 40 tons of mercury pollution annually.

An export ban on sales of commodity-grade mercury will result in an increase in world atmospheric mercury pollution. The increase will be caused by the increase in virgin mercury mining. More troubling is the likelihood that the new mining that will occur will be from what is called artisanal mercury mining. This type of mining is much less efficient because of the small scale and crude equipment. Air emissions could be as

much as 50% of production. The net effect of an export ban of secondary mercury from the United States and the European Union could result in an increase in global mercury pollution by 500 tons per year. Along with the current mercury mining pollution, the result of this legislation could be up to 540 tons per year of mercury atmospheric pollution

The argument that the suspension of mercury sales will cause prices to increase and thereby cause less artisanal gold mining is not valid. As indicated by Mr. Edward Weiler, economist for the Environmental Protection Agency, “Demand for mercury by miners is insensitive to mercury price”; “Hg cost is very small relative to value of recovered gold (approximately 0.1%).”<sup>2</sup>

In Mr. Weiler’s report, he indicated that it takes a pound of mercury to produce a pound of gold by artisanal miners. Today’s world market price for mercury is about \$8.00 per pound. Today’s gold price of \$650 per troy ounce is equivalent to \$9,477.00 per pound. Therefore mercury cost is .08%. If the price of mercury were to increase to \$100.00 per pound because of the removal of supplies for the U.S. and Europe, then the mercury cost would become only 1% of the value of gold recovered. In my opinion, \$100.00 per pound mercury would be sufficient incentive to create enough new artisanal mercury mines. These new mines would not only supply artisanal gold miners with the mercury they want, they will also produce much more atmospheric mercury pollution.

I strongly recommend that H.R. 1534 not be passed. In addition, I strongly encourage the resumption of sales of mercury from the Federal stockpiles. Passage of H.R. 1534 could result in 540 tons of mercury pollution per year. Non-passage of H.R. 1534 with the resumption of sales from stockpiles could result in the elimination of 40 tons of mercury pollution per year.

1. Revich, Boris (1994): “Mercury Levels in the Atmospheric Air of Some of the Former USSR Cities and in Human Blood, Hair and Urine” published from the: *International Conference on Mercury as a Global Pollutant*. Whistler, British Columbia, Canada, July 10-14, 1994.

Note: Mr. Revich indicates that the Khaidarkansky mine in Kirghizia emits 21 tons of mercury per year. With an average production of 500 tons per year the 21 tons represents 4.2%.

2. Weiler, E. (2002): “Can the U.S. act alone on mercury?” presented at the US EPA-sponsored conference: *Breaking the Mercury Cycle: Long-Term Management of Surplus Mercury & Mercury-Bearing Waste*, Boston, Massachusetts, USA, May 1-3, 2002